CHAPTER SIX

TRANSFORMING ACQUISITION AND LOGISTICS

Chapter 6 - Transforming Acquisition and Logistics

Background

Acquisition and Logistics represent both ends of the process of supporting the DoD with equipment, supplies, and all other resources to allow our forces to perform their roles throughout the spectrum of mission taskings. Acquisition processes bring major weapon systems and support equipment into DoD inventories, while Logistics processes support operations and maintenance activities with fuel; food; spare parts; finished goods and other supplies; and maintenance, repair, and overhaul activities necessary to keep equipment and units mission-capable. Acquisition and Logistics are responsible for a large amount of DoD and private-sector process costs, physical inventories, and the extensive infrastructure needed to acquire and maintain nearly 1,400 DoD weapons systems throughout their life cycles. Because of the size of the resources involved, a series of Acquisition and Logistics Initiatives have been promulgated throughout the last decade. Major, comprehensive efforts (such as the establishment of the Office of the Deputy Under Secretary of Defense (Acquisition Reform) in 1992) set in motion a series of legislative, process, and workforce improvements. These allowed a reduction of the acquisition and logistics costs associated with bringing military materiel into service and providing logistics support throughout its life cycle. During this time, the results of several studies contributed to the data supporting the positive impact of reduced governmental oversight and regulations while employing technology and best commercial practices to revolutionize the way government acquires and sustains its military capabilities.

These efforts are achieving the desired outcomes, which are to deliver newer technology into warfighter hands more rapidly and affordably, and once it is in service, to provide support for the required levels of military performance at the lowest levels of total ownership costs. The impact of all this change on the DoD workforce has not gone unnoticed. Workforce development efforts and change management programs seek to train and motivate the retained workforce so that they can exploit the new rules and tools they have been given by DoD’s strategic transformation in Acquisition and Logistics.

Chapter 6 - Transforming Acquisition and Logistics

- **Background**
  - Since 1992, focused reform efforts on a wide range of processes
  - Secure goods/services from private sector
  - Synchronize processes for best-value support
    - High mission support performance
    - Low total ownership costs

Chapter 6 - Transforming Acquisition and Logistics

Initiatives

The following five initiatives come under Transforming Acquisition and Logistics, which will be explained below in greater detail:

6.01 Strategic Goals for Acquisition and Logistics Transformation
6.02 Acquisition Focus Areas
6.03 DoD Logistics Vision
6.04 Actions for Logistics Transformation
6.05 Logistics Leadership

Each one of these initiatives addresses key areas of the broad and complex matrix of Acquisition and Logistics processes throughout DoD, spanning interfaces between the private industrial supply base and the government supply chain, which delivers and sustains our military capability worldwide. During the conduct of this project, the team's primary focus was on initiatives 6.01, 6.02, and 6.04.

Chapter 6 - Transforming Acquisition and Logistics

- **Initiatives**
  - Strategic Goals for Acquisition and Logistics Transformation
  - Acquisition Focus Areas
  - DoD Logistics Vision
  - Actions for Logistics Transformation
  - Logistics Leadership

Chapter 6 - Transforming Acquisition and Logistics

Performance Measures

Acquisition and Logistics measures fall into two broad categories. First are the measures that relate to cost of ownership of the military forces. Physical inventories, workforce, and infrastructure are expensive to maintain. Ownership cost measures relate to the cost of these assets, processes, and the initiatives to rightsize them to the minimum levels necessary to maintain capabilities to support warfighting forces in their defined roles. These concepts lead to the second set of measures, that address performance outcomes of Acquisition and Logistics assets, processes, and initiatives in terms of supporting readiness and sustainability of warfighting forces in their defined roles. Process cycle times are one example of an outcome measure that indicates the responsiveness of these processes to the warfighting forces.

Existing performance measures for the Acquisition and Logistics Initiatives generally target desired outcomes, as opposed to actual savings achieved through the specific programs. The wide range of processes in this area often result in aggregate measures that are surrogates for final outcomes. When applied across the range of processes, weapons systems, and warfighting forces, the relationship to “final” outcomes of readiness to deploy and the effectiveness and sustainability of engaged forces in defined roles become unclear. Coordinated, sustained efforts are required to develop and enable measures that result in timely, accurate, and meaningful information for DoD leaders to act upon. The current suite of aggregate measures can cause conflicting actions within existing DoD supply chains, contributing to excess costs of ownership and reduced capacity to support fighting forces.

Recommendation

This chapter includes specific recommendations for each initiative. An overarching recommendation is that the Office of the Under Secretary of Defense (Acquisition, Technology & Logistics) [OUSD(AT&L)] should examine the use of aggregate measures and consider supplementing them with associated sets of “disaggregated” measures to provide a more comprehensive picture of the various initiatives within this chapter. The cost of collecting, validating, analyzing, and reporting this additional information should be considered.

Chapter 6 - Transforming Acquisition and Logistics

- **Measures**
  - Existing measures fall into two broad categories: (1) cost of ownership of resources and (2) outcomes in terms of supporting readiness and sustainability
  - Existing aggregate outcome measures have been able to drive large-scale transformation during the past decade, but must become more focused on driving the tailored solutions required for continued performance gains
- **Recommendation**
  - To provide a more comprehensive picture, consider use of "disaggregated" measures to complement existing aggregate measures

6.01 - Strategic Goals for Acquisition and Logistics Transformation

Background

Since the establishment of the Office of the Deputy Under Secretary of Defense (Acquisition Reform) [ODUSD(AR)] in 1992, the DoD has pursued a comprehensive effort to reform its acquisition process. Reform activities have focused not only on the laws, the regulations, and the procedures related to that process but also on the Defense Acquisition workforce who work within that process, the information technology systems that support the process, and the organizational structure within which the process operates. As stated in the *1999 Annual Report to the President and the Congress*, "Acquisition Reform results in more efficient business practices, creating an environment for DoD to acquire goods and services better, faster, and cheaper."

The use of performance measures is not new to Acquisition Reform. In 1994, the DoD conducted a study entitled *The DoD Regulatory Cost Premium: A Quantitative Assessment.* This detailed activity-based cost study supported DoD's reform efforts by providing credible, empirically based estimates of the cost impact of DoD regulation and oversight. A follow-up study in 1997, entitled *Acquisition Reform Implementation - An Industry Survey,* provided an assessment of how well DoD was doing in implementing reform initiatives at the contract and program levels. The initiatives involved were those originated through either reform legislation or policy changes and aimed at compressing cycle times, reducing program costs, and more effectively leveraging commercially available technologies and practices. More than 400 interviews were conducted with industry personnel working on 90 DoD contracts/programs. The interviews assessed awareness of 53 Acquisition Reform Initiatives; the level of implementation of those initiatives; and the outcome in terms of cost, schedule, quality, and access to commercial technology or processes.

Approach

To gather background information on this initiative, the team reviewed numerous printed documents, including reports and studies, as well as the Acquisition Reform and Defense Reform Web sites. An interview was conducted with the Assistant Deputy Under Secretary of Defense (Systems Acquisition) [ADUSD(SA)], Office of the Deputy Under Secretary of Defense (Acquisition Reform). Additional materials were provided both during and after the interview.

6.01 - Strategic Goals for Acquisition and Logistics Transformation

- **Background**
  - ODUSD(AR) established in 1992
  - Pursued comprehensive effort to reform DoD Acquisition process
  - The goal is a more efficient process to acquire “cheaper, faster, better”
  - Use of performance measures is not new - several previous studies focused on activity-based cost of existing process and cost, schedule, and quality impact of changes
- **Approach**
  - Reviewed existing documentation (reports/studies) and Web sites
  - Interviewed ADUSD(SA)

Initiative 6.01 - Strategic Goals for Acquisition and Logistics Transformation

Performance Measures

The strategic goals outlined for this initiative cover both Acquisition and Logistics and recognize the relationship and interaction between those two core processes. The three strategic goals include (1) field high quality Defense products quickly and support them responsively, (2) lower the total ownership cost of Defense products, and (3) reduce the overhead cost of the Acquisition and Logistics infrastructure. The objectives related to the first strategic goal reduce average Acquisition cycle time for product development and delivery of Major Defense Acquisition Programs (MDAPs) and reduce Logistics response time. The performance measures used are reported under the GPRA. The objectives related to the second strategic goal minimize cost growth in MDAPs and reduce Logistics support cost per weapon system. The performance measure for the percentage of cost growth for MDAPs is a current GPRA measure. The objective related to the third strategic goal reduces the funding required by Logistics and other infrastructure. One metric supporting this objective is the reduction in research, development, test, and evaluation (RDT&E) infrastructure cost. Acquisition related measures are discussed in this section. Logistics related measures are discussed in section 6.04.

6.01 - Strategic Goals for Acquisition and Logistics Transformation

- **Performance Measures**
  - Goal - Field high quality Defense products quickly and support them responsively
    - Measure - Major Defense Acquisition Program (MDAP) cycle time
    - Measure - Logistics response time
  - Goal - Lower the total ownership cost of Defense products
    - Measure - MDAP cost growth
  - Goal - Reduce the overhead cost of the Acquisition and Logistics infrastructure
    - Measure - Research, development, test and engineering (RDT&E) infrastructure

Initiative 6.01 - Strategic Goals for Acquisition and Logistics Transformation

Recommendations

The performance measures for the Acquisition process—cycle time, product (output) cost, and related infrastructure cost—are good, customer-oriented measures. When combined with GPRA measures related to operational test and evaluation events, and Acquisition workforce measures (such as numbers and certification), a fairly comprehensive picture of the Acquisition process emerges, as it relates to Major Defense Acquisition Programs (MDAPs). However, these initiatives were meant to impact more than just MDAPs (ACAT I programs). Similar cycle time and cost growth measures for non-MDAP programs should be considered, at least for ACAT II programs managed within the Services. Consideration will need to be given to the cost of collecting, validating, analyzing, and reporting this level of information to the OSD level. The benefit will be a greater appreciation of the impact of these initiatives at the Service level.

The inclusion of Logistics process measures in this initiative represents the recognition of the need for a total life-cycle perspective in managing Defense materiel. Decisions made during the acquisition process often drive logistics process costs. The integration of these two processes is key to providing to the warfighters the materiel capability needed to perform their mission; however, the current organizational structure that creates separate Acquisition and Logistics “stove-pipes” sometimes acts as a barrier to effective integration. This barrier is being overcome, to some extent, through the Integrated Process Team structure. DoD needs to continue efforts to effectively integrate the Acquisition and Logistics processes into one cohesive process, from warfighter requirement to retirement and disposal of fielded equipment, and develop customer-oriented performance measures that reflect the effectiveness of that cohesive process.

6.01 - Strategic Goals for Acquisition and Logistics Transformation

- **Recommendations**
  - Develop similar cycle time and cost growth measures for non MDAP (ACAT II) programs so impact of these initiatives can be measured below the OSD level
  - Continue integration of acquisition and logistics processes into one cohesive process from warfighter requirement to retirement and disposal of fielded equipment, and develop customer-oriented measures that reflect the effectiveness of that cohesive process.

Initiative 6.01 - Strategic Goals for Acquisition and Logistics Transformation

Goal: Reduce Major Defense Acquisition Program cycle times 25 percent by the end of FY 2000

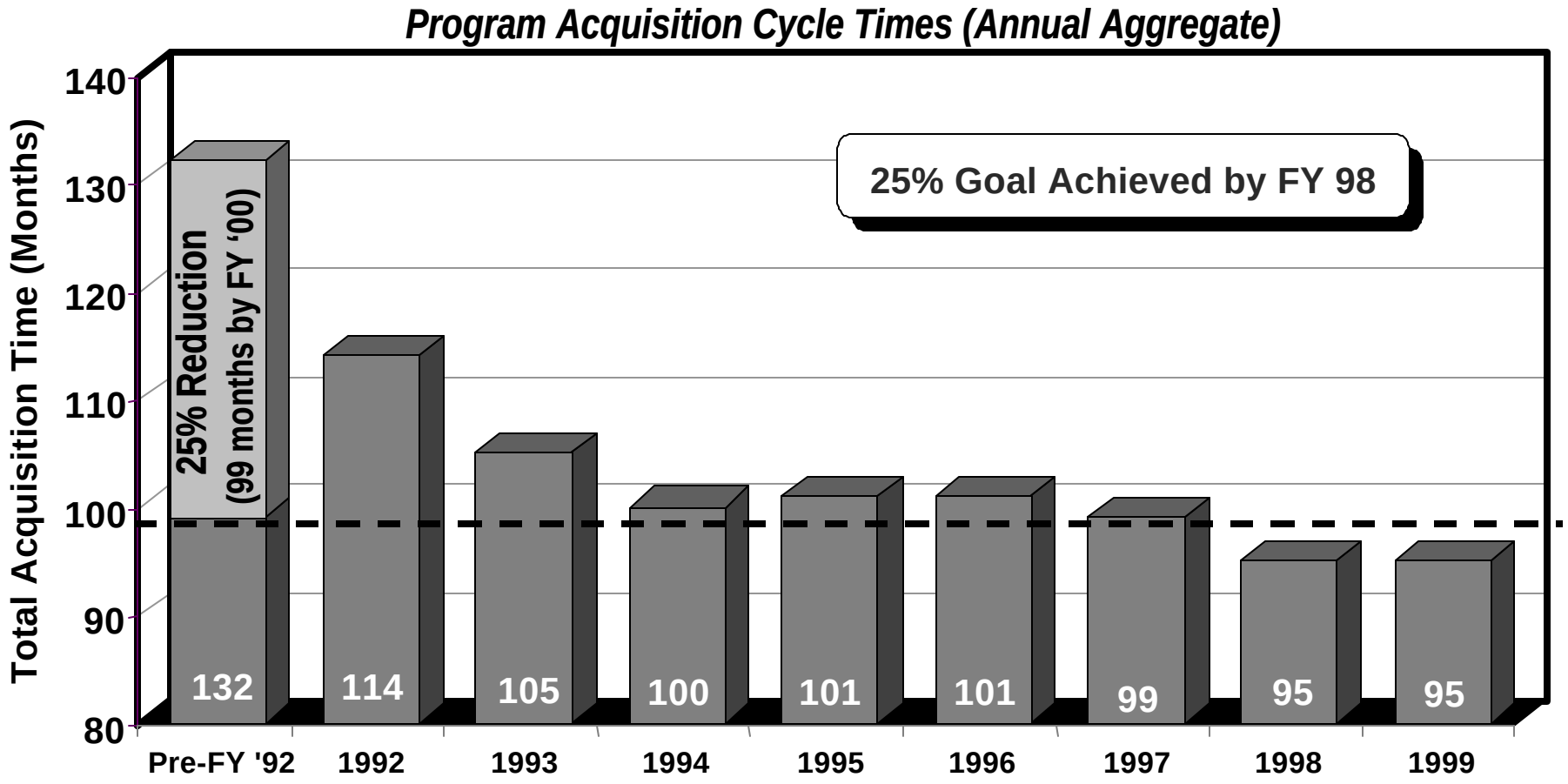
Performance Measure: Major Defense Acquisition Program cycle time.

	Baseline								
Fiscal Year	**Pre-1992**	**1992***	**1993***	**1994***	**1995***	**1996***	**1997***	**1998***	**1999***
Actual	**132**	**114**	**105**	**100**	**101**	**101**	**99**	**95**	**95**

Source: ODUSD(AT&L), Selected Acquisition Reports (* Data as of September of fiscal year indicated)

Organization, Systems, and Other Issues: This measure is reported by the DoD under the Government Performance and Results Act. For those programs initiated during or after 1992 and in development during the fiscal year indicated, cycle time is the average projected time (in months) from program start to initial operational capability. Baseline reflects pre-FY1992 average acquisition cycle time.

Reduce Major Defense Acquisition Program Cycle Times 25% by the End of FY 00



Initiative 6.01 - Strategic Goals for Acquisition and Logistics Transformation

Goal: Reduce total ownership cost by minimizing the cost growth of Major Defense Acquisition Programs (MDAPs) to no greater than 1percent annually

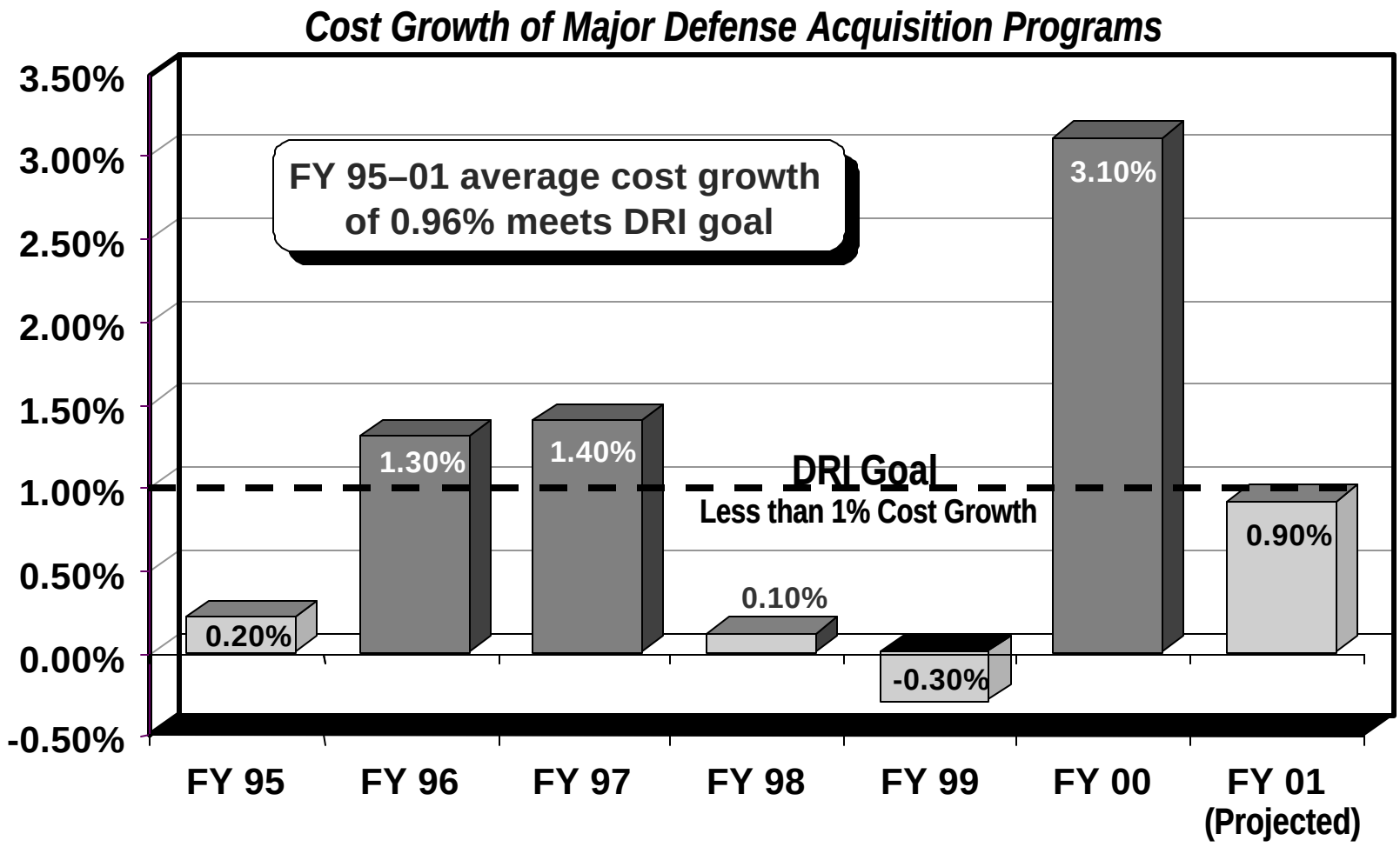
Performance Measure: Percentage of cost growth of Major Defense Acquisition Programs

	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
Actual	**.20%**	**1.30%**	**1.40%**	**.10%**	**-.30%**	**3.10%**	
Projected							**.90%**

Source: OUSD(AT&L); GPRA Performance Plan 2000

Organization, Systems, and Other Issues: This measure is reported by the DoD under the Government Performance and Results Act. It represents the average cost growth for programs continuing from the previous year to the current year. Cost growth is the difference between the current year's budget and the previous year's budget, divided by the budget for the previous year. Quantity changes and inflation are considered. DoD uses its Planning, Programming, and Budgeting System to monitor for indications of potential cost growth. Data on cost growth are collected from the Selected Acquisition Reports that the Services submit annually to OSD. OSD validates the data, analyzes them along with other programmatic information, and it is reports them to DoD leadership for action.

Reduce Total Ownership Cost by Minimizing the Cost Growth of Major Defense Acquisition Programs to no Greater than 1% Annually



Initiative 6.01 - Strategic Goals for Acquisition and Logistics Transformation

Goal: Reduce Research, Development, Test and Evaluation (RDT&E) Infrastructure by 10 percent (2001) and by 25 percent (2005).

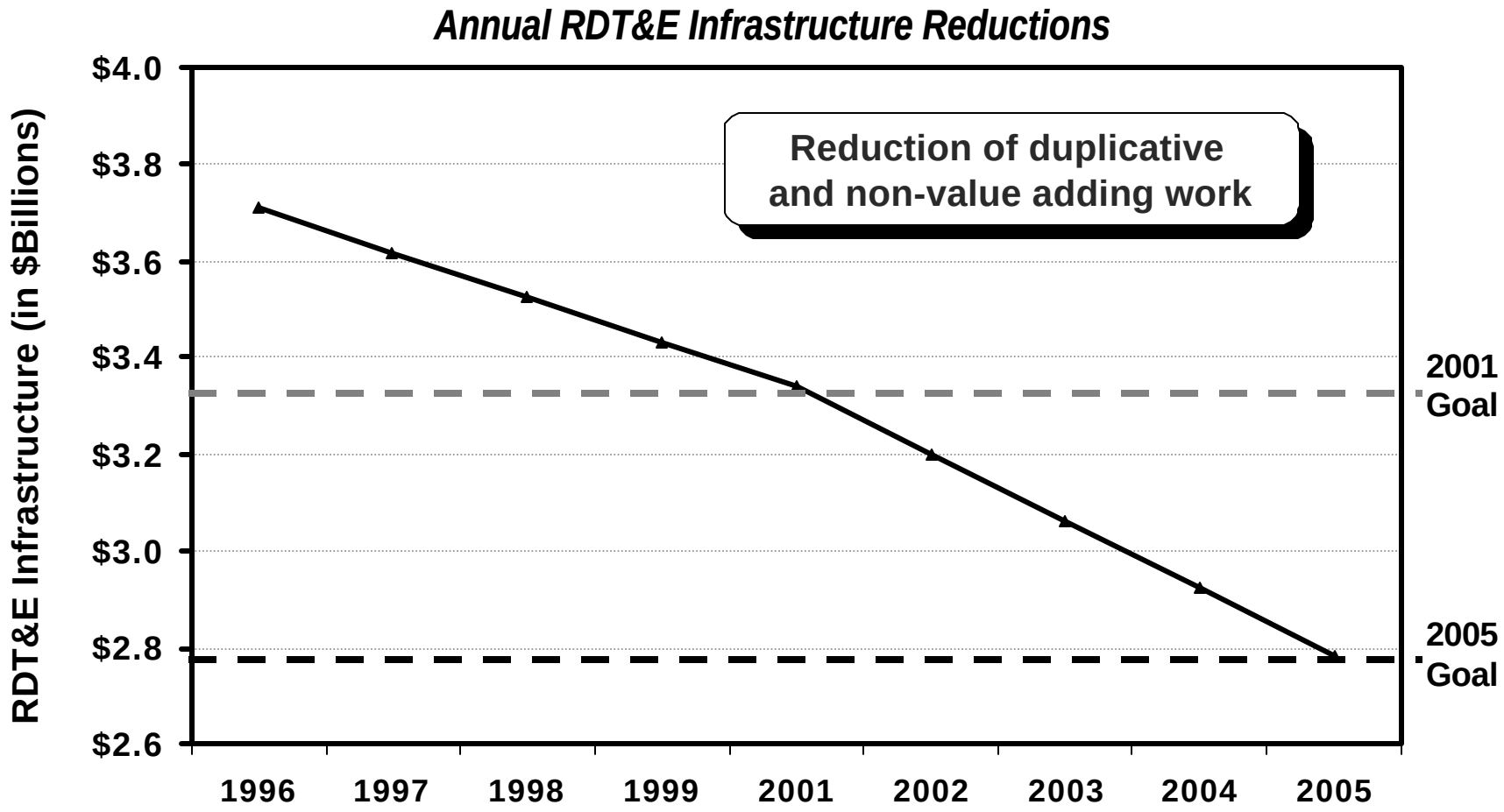
Performance Measure: RDT&E Infrastructure (in $Billions).

	Baseline		
	1996	**2001**	**2005**
Goal		**3.339**	**2.783**
Actual	**3.711**		

Source: *A Plan to Streamline DoD's Science and Technology, Engineering, and Test and Evaluation Infrastructure - Report of the Section 907 and Section 912(c) Senior Steering Group for Review of the RDT&E Infrastructure* (July 1999)

Organization, Systems, and Other Issues: Baseline data were derived through use of a cost-based management tool developed for this study. The study recommended actions that would streamline data collection and maximize the fidelity of the data. The study cited a goal of capturing FY 1999 data by April 2000. No actual data for subsequent years are currently available.

Streamline RDT&E Infrastructure - Reduce RDT&E Infrastructure by 10% (2001) and by 25% (2005)



Initiative 6.02 - Acquisition Focus Areas

Background

The Acquisition and Logistics processes in DoD are very broad and very complex. These processes also perform a vital, ongoing function within the DoD: providing materiel and support to the warfighter. In order to manage change effectively and efficiently within these two ongoing processes, it is necessary for the change leaders for these processes to focus their efforts on key areas where they can have the most impact on the processes.The focus areas identified by the Defense Acquisition Reform office are civil-military industrial integration, new approach to systems acquisition, workforce improvement, change management, and Logistics transformation.The first four areas appear to primarily focus on the Acquisition process. The last, Logistics transformation, is the subject of discussion in section 6.04. Actions taken in these areas will result in changes within the processes that, when measured, will provide leading indicators of achievement of the process outcome goals.

The desired results related to civil-military industrial integration are increased access to commercial technology, increased competition for DoD-purchased goods and services, and reduced costs for those goods and services. Actions in this area include specifications and standards reform, improved management of government-furnished property, increased use of commercial packaging, and expanded use of commercial services.

The desired results related to DoD’s new approach to systems acquisition include getting newer technology to the warfighter more quickly, increasing the level of competition in the marketplace, and making more efficient use of funding in the Acquisition pipeline. DoD is rewriting key acquisition regulations and directives to include concepts such as evolutionary Acquisition and dissimilar competition, and greater integration of test and evaluation and Logistics with the Acquisition process.

In order to effectively function within this new process and its environment, the DoD workforce must be trained and motivated to accept the change. The focus on workforce improvement will concentrate on a continuous learning approach. DoD training is expanding into computer-based learning and enrichment of Acquisition- related curricula and is also making a concerted effort to institutionalize a change management approach through the use of a proven enterprise change model. This effort includes training in change management and accountability for effective change through the use of performance scorecards. A Change Management Center has been established to coordinate this effort.

6.02 - Acquisition Focus Areas

- **Background**
  - Effective change to the broad, complex Acquisition and Logistics processes require a focus area approach
  - Five focus areas have been identified:
    - Civil-military industrial integration
    - New approach to systems acquisition
    - Workforce improvement
    - Change management
    - Logistics transformation
  - Focus area approach results in a broad range of actions, primarily related to the Acquisition process
  - Logistics transformation is discussed in 6.04

Initiative 6.02 - Acquisition Focus Areas

Approach

To gather background information on this initiative, the team reviewed numerous printed documents, including reports and studies, as well as the Acquisition Reform and Defense Reform Web sites. An interview was conducted with the Assistant Deputy Under Secretary of Defense (Systems Acquisition) [ADUSD(SA)], Office of the Deputy Under Secretary of Defense (Acquisition Reform) [ODUSD(AR)]. Additional materials were provided both during and after the interview.

Performance Measures

The team did not prepare any scorecards for this initiative. The status of performance indicators for the actions related to the various focus areas varies. As of the date of the interview, ODUSD(AR) had identified the actions required for each focus area, but some leading indicators had not yet been developed. Examples of some leading indicators identified include (for civil-military industrial integration) percentage of repairable National Stock Numbers (NSNs) with commercial designators, percentage of awards to commercial companies, and dollar value of FAR Part 12 contracts; (for new approach to systems acquisition) percentage of Operational Requirements Documents (ORDs) with cost or price as a military requirement, percentage of ORDs using flexible requirements,and the percentage of programs prior to Milestone II using test and evaluation to influence design and having firm Logistics support strategies.

Recommendations

ODUSD(AR) is on the right track by establishing performance indicators that will provide an advanced look at the probability of achievement of its desired outcome goals. The office should complete that task as soon as possible. It would be helpful to estimate the proportional impact of each action at this stage so that management attention can be focused appropriately. A system to collect, validate, analyze, and report data should be established. Monitoring of results related to actions and, subsequently, outcomes should be followed by further management actions to adjust emphasis within the focus areas or to create new focus areas.

6.02 - Acquisition Focus Areas

- **Approach**
  - Reviewed existing documentation (reports/studies) and web sites
  - Interviewed ADUSD(SA)
- **Performance Measures**
  - No scorecards prepared for this initiative
  - ODUSD(AR) has identified actions for each focus area and is identifying performance indicators
- **Recommendations**
  - Complete identification of performance indicators
  - Establish collection, validation, analysis, reporting and action system

Initiative 6.04 - Actions for Logistics Transformation

Background

The subinitiatives in this section focus on two primary outcomes to increase Logistics value to the warfighter. The first is increased performance in the form of reduced cycle times for Logistics processes. The second is reduced cost in the form of reduced process and infrastructure costs. Both of these outcomes support warfighter readiness and affordability in terms of total ownership costs.

Subinitiatives

There are three subinitiatives under the Actions for Logistics Transformation Initiative:

- Reduce Wholesale Order Receipt Time
- Increase Total Asset Visibility
- Reduce Supply Inventories

6.04 - Actions for Logistics Transformation

- **Background**
  - Increase Logistics value to warfighter through two primary outcomes:
    - To improve Logistics performance through reduced cycle times
    - To reduce Logistics process and infrastructure costs
- **Subinitiatives**
  - Reduce Wholesale Order Receipt Time
  - Increase Total Asset Visibility
  - Reduce Supply Inventory

Initiative 6.04 - Actions for Logistics Transformation

Performance Measures

Logistics transformation measures fall into two broad categories. First, the measures that relate to cost of ownership of the military forces. Physical inventories, workforce, and infrastructure are expensive to maintain. Ownership cost measures relate to the cost of these assets, processes, and the initiatives to rightsize them to the minimum levels necessary to maintain capabilities to support warfighting forces in their defined roles. These concepts lead to the second set of measures, which address performance outcomes of Acquisition and Logistics assets, processes, and initiatives, in terms of supporting readiness and sustainability of warfighting forces in their defined roles. The subinitiative to reduce supply inventory is focused directly on reducing infrastructure costs by eliminating the ownership costs of maintaining unnecessary spare parts and finished goods inventories. The subinitiatives to reduce wholesale order receipt time and increase total asset visibility seek to improve the performance of DoD Logistics processes by supplying required parts and services in reduced cycle times. In these subinitiatives, reduced cycle times have two outcomes. Of primary importance, they enhance readiness and sustainability of warfighting forces in an uncertain world. They also help these forces to reduce their operational inventories and, thus, the Logistics costs of operations and mobility transportation needs.

Existing performance measures for these Logistics Transformation subinitiatives generally target desired outcomes, as opposed to actual savings achieved through specific programs. The wide range of processes in this area often result in aggregate measures that are convenient surrogates for final outcomes. For example, the DoD concept of supply chains suggests multiple, connected outcomes in each link of the chain. When applied across the range of processes, weapons systems, and warfighting forces, the relationship to “final” outcomes of readiness to deploy and the sustainability of engaged forces in defined roles becomes fuzzy. Coordinated, sustained efforts are required to develop measures that result in decision-grade information for DoD leaders to act upon. The current suite of aggregate measures can cause conflicting actions within existing DoD supply chains, contributing to excess costs of ownership and reduced capacity to support fighting forces. For example, the current aggregate measure for Logistics Response Time (LRT) includes all classes of supply, from readily available commodities to manufactured spare parts. There is an aggregate goal for this measure. It may be unrealistic for the item manager for a group of spare parts to strive to meet an LRT of 18 days, and doing so may cause the item manager to consider paying premiums for prime labor costs or same-day air transport not needed for that item.

6.04 - Actions for Logistics Transformation

- **Performance Measures**
  - Existing measures relate to Logistics response time, Total asset visibility and inventory value of spare parts and finished goods inventories
  - These measures target desired outcomes, rather than actual savings
  - Relationship to final outcomes becomes “fuzzy”
  - Aggregate measures could contribute to increased cost and decreased capacity

Initiative 6.04 - Actions for Logistics Transformation

Recommendation

Specific recommendations are included in each subinitiative discussion in this section. In general, aggregate, high-level performance measures need more focus to drive further process improvements for increased Logistics value to warfighter.

6.04 - Actions for Logistics Transformation

- **Recommendation**
  - Aggregate, high-level performance measures need more focus to drive further process improvements for increased Logistics value to warfighter

Initiative 6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

Background

Reduced wholesale order receipt times are one goal of a suite of reduced modernization and Logistics support cycle time initiatives in process throughout DoD. The process owner for this initiative is the Deputy Under Secretary of Defense (Logistics) [DUSD(L)]. The goal is to shorten the time between the warfighter need for supplies and spare parts and the time of delivery at the point of need. The benefits of these shorter delivery times include increased support levels to fighting forces and the reduced need for them to maintain physical inventories to cover wholesale response lags. Reduced wholesale order receipt time goals drive other contributory process improvements throughout the DoD supply chain to reduce customer order process times, inventory control point (ICP) processing times, distribution and transportation channel times, and customer delivery times from destination central supply points to the final point of need. The shift to commercial practices is in part driven by the need for reduced cycle times and contributes to lower wholesale inventories and supporting infrastructure as well. The impact of all of these subordinate process improvements roll up to an overall outcome of reduced wholesale order receipt times.

Approach

The project team investigated current publicly available information and augmented this information with interviews with the initiative lead to gain a direct understanding of underlying goals and currently available information/data that could be used in developing performance measures and scorecards. Primary written sources for this initiative were the documents located in LMARS, operated by the Defense Automatic Addressing System Center (DAASC). We then interviewed the initiative lead. Alternative measures to existing cycle time measures were discussed.

6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

- **Background**
  - Part of cycle time reduction initiatives for modernization and Logistics support cycles
  - Goal is to partner with best-value providers integrated to provide rapid response to warfighter needs
  - Reduced wholesale order receipt times indicate progress toward these goals
- **Approach**
  - Literature review of regulations, audits, and policies
  - In-depth interviews with initiative lead

Initiative 6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

Performance Measures

Logistics response time (LRT), as defined in LMARS, is the primary measure of wholesale response times in DoD. Goals have been set to reduce the gross, aggregate LRT in DoD from a baseline of 36 days in FY 1997 to 18 days in FY 2000. While the published goal has been met, other potential improvements can be made to LRT as currently measured and reported. LRT does not accurately measure wholesale response to the customer. For 1,000 requisitions counted, if half of them are satisfied in 3 days and the other half are satisfied in 103 days, the LRT for those requisitions is 53 days, which represents none of the actual responses experienced by the customer. Backorders are not counted until the order is received at the customer location. For the same 1,000 requisitions in the first illustration, if the requisitions were received on January 1, 2000, the LRT for January would be 3 days, while LRT recorded in April would be 103 days, with no change in the underlying processes. Also, current LRT does not reflect customer needs. If customers order items with required delivery days in excess of the FY 2000 18-day goal, they will drive the LRT higher than 18 days, prompting management attention even though the system reacted properly and with respect to the customer's requirements. Alternatively, the supply system, striving to meet a fixed, arbitrary metric, will send orders early to meet response time goals, but also cause problems with the customer who is not prepared to store the delivered property that arrived early.

Finally, aggregate LRT mixes rapid, best-commercial-process LRTs with long-lead-time, military-unique LRTs to arrive at the aggregate 18 days experienced today. This reduces its usefulness as a management performance tool. Eighteen days would be considered unsatisfactory for perishable foodstuffs, but exceptional for aircraft turbine blades. Combined, aggregate LRT lacks the information to generate management actions and process improvements for either class of supply.

The usefulness of wholesale order receipt time information could be improved by two refinements to the current LRT measurement process. "Disaggregation" of the present, combined measures into the major wholesale supply channels would be beneficial because the performance of each of the major wholesale channels could be observed and improved as necessary. The most important separation would be between items that are commercially available "finished goods", and items that are manufactured specifically for military purposes, with little or no commercial base. The DoD supply channels (such as Prime Vendors supplying these finished goods) could be compared more accurately with the best commercial practices of private industry. Variation from the commercial benchmark for each class of Prime Vendor-supplied items would then be an indicator of DoD contracting performance.

6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

- **Performance Measures**
  - Logistics Response Time (LRT) is the primary DoD response metric
  - LRT is an outcome of best-value supply chain integration and acceleration
  - Improved LRT has been the goal of many important Logistics initiatives
  - Measure currently too aggregated to drive further process improvements, based on an LRT measured in days

Initiative 6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

Performance Measures (cont'd)

Lower LRTs would be indicative of how many of these items are on high-performance, long-term contracts with competitive performance criteria. For nonfinished goods, the separate LRTs of these supply channels would measure the efficiency of DoD demand planning, forecasting, order capture, storage & distribution, and other supply chain processes that are unique to many items without commercial equivalent or competitive market. Finally, hybrid initiatives such as DLA's Virtual Prime Vendors would be focused on reducing LRTs by combining the best government and commercial practices to create the most efficient hybrid supply chain for items that could be supplied through this kind of supply channel.

Another improvement would be to revise the current unbounded time-based measure (response days) and adopt instead a more customer-aligned measure such as the percentage of orders meeting customer-required delivery dates (RDDs). Adoption of an RDD-based performance measure would improve on several of the current LRT shortcomings. Backorders would be recorded as soon as the RDD expired, instead of months later (as happens with the current system). Excess transportation dollars would not be spent delivering items before they were needed. For units tasked with mobility missions, RDD performance could be measured by RDD performance ranges and by types of items. If commanders knew that only 20 percent of their historical 3-day RDDs were met for their weapons system parts, they could report their readiness status more accurately with respect to their tasked unit response times and could also set their retail inventories and War Reserve Materiel (WRM) levels accordingly. Vendor contracts could be written with criteria based on RDD, generating more tailored logistic response performances than with the 30-, 60-, and 90-day criteria often seen in current Logistics contracts. Ideally, both changes (disaggregation and use of a customer-aligned measure) could be incorporated into a high-performance response metric that would measure response in terms of RDDs, separated into the major wholesale supply channels such as finished goods, Prime Vendors, on-demand manufacture (for military-unique items), and hybrid channels such as Virtual Prime Vendors.

6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

- **Performance Measures (cont'd)**
  - Further supply chain improvements could be driven by use of required delivery date (RDD) metric
    - Percentage of requisitions meeting RDD measures for "on-time" deliveries would be a more accurate measure of responsive Logistics for both long and short RDDs
  - RDD response measure also useful for mobility reporting
    - Stratified RDD percentages would help mobility units plan for premobility supply surges and report readiness based on actual supply chain performance
    - Would also impact mobility inventories

Initiative 6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

Recommendations

The first recommended improvement is to disaggregate the present, combined measures into the major wholesale supply channels, so that the performance of each of the major wholesale channels can be observed and improved as necessary.

The second recommendation is to revise the current unbounded time-based measure (response days) and adopt instead a more customer-aligned measure such as the percentage of orders meeting customer-required delivery dates.

6.04 - Actions for Logistics Transformation (Reduce Wholesale Order Receipt Time)

- **Recommendations**
  - Disaggregate the present, combined measures into the major wholesale supply channels
  - Revise the current unbounded time-based measure (response days) and adopt instead a more customer-aligned measure

Initiative 6.04 - Actions for Logistics Transformation (Reduce Logistics Response Time)

Goal: Reduce the wholesale system Logistics response time, which would reduce (1) peacetime retail inventory levels, and thus costs, and (2) wartime deployment requirements, reducing Logistics burdens on strategic transportation assets

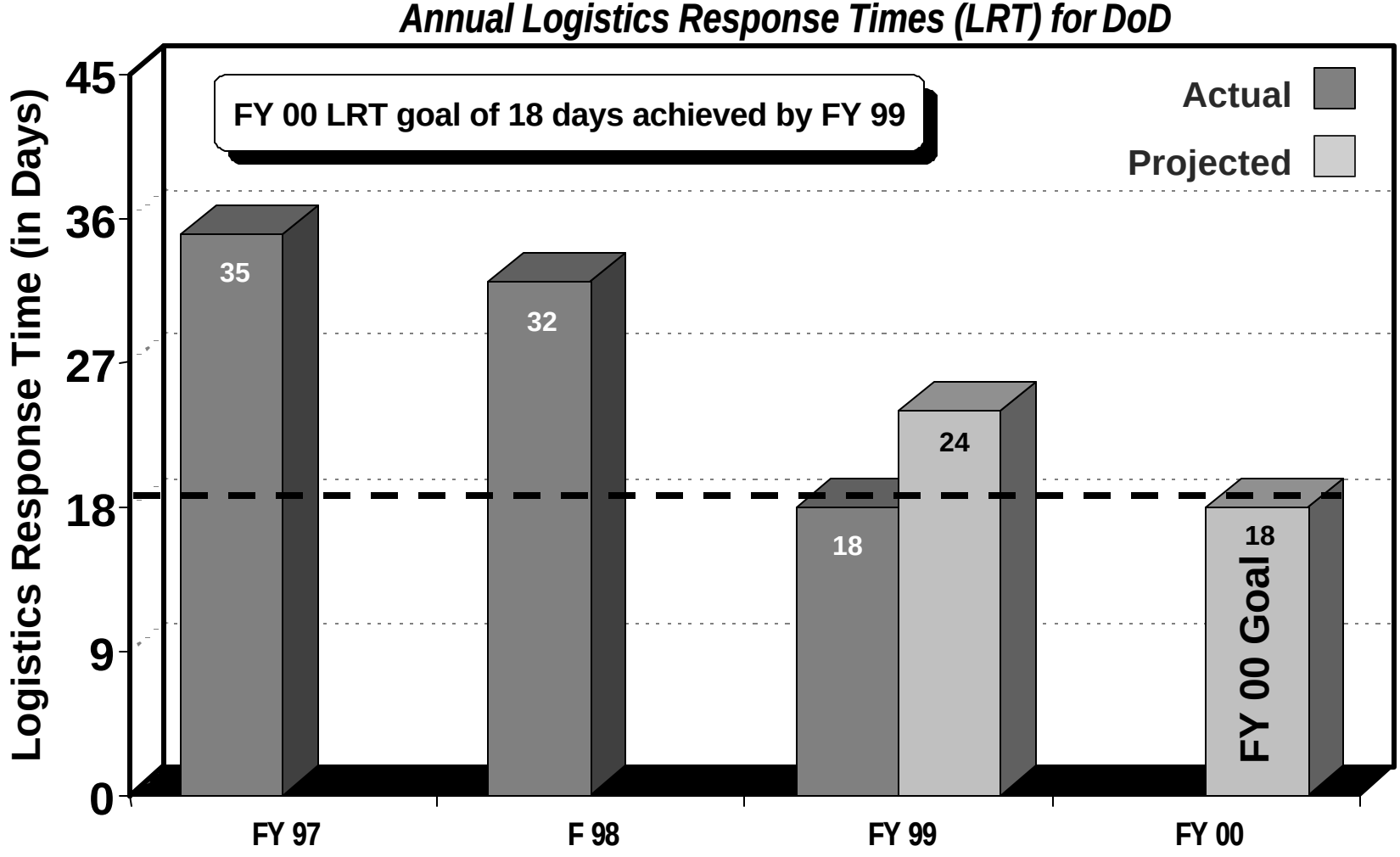
Performance Measure: Number of days from customer order to delivery at end-customer location

	FY 1997	FY 1998	FY 1999	Goal FY 2000
Projected (in days)			24	18
Actual	35	32	18	

Source: GPRA Performance Plan 2000

Organization, Systems, and Other Issues: Logistics Response Time (LRT) is the elapsed time from customer requisition to receipt of materiel ordered from the DoD wholesale system. For all methods of delivery, the DoD aggregate Logistics response time met its FY 2000 goal in FY 1999 for reducing wholesale order receipt times.

Reduce Wholesale Logistics Response Time to 18 days by FY 00



Initiative 6.04 - Actions for Logistics Transformation (Increase Total Asset Visibility)

Background

This initiative is owned by the DUSD(L). The desired outcome of Total Asset Visibility (TAV) is higher readiness and sustainability of military forces through redistribution of repair parts and equipment from any source in DoD. Also, the extra inventory coverage throughout DoD should result in some level of inventory reductions as spot shortages are filled more quickly from additional available sources.

Approach

The project team investigated current publicly available information and augmented this information with interviews with the initiative lead to gain a direct understanding of underlying goals and currently available information/data that could be used in developing performance measures and scorecards. Primary written sources for this initiative were the GPRA Performance Plans for FY 1999 and FY 2000. We then interviewed the Total Asset Visibility Logistics Analyst in the ODUSD(L).

6.04 - Actions for Logistics Transformation (Increase Total Asset Visibility)

- **Background**
  - Initiative goal is to obtain higher readiness and force sustainability through greater visibility and accessibility of existing worldwide spare parts inventories
- **Approach**
  - Literature review of regulations, audits, and policies
  - Interview with initiative lead

Initiative 6.04 - Actions for Logistics Transformation (Increase Total Asset Visibility)

Performance Measures

TAV is defined as the percentage of total DoD materiel asset inventories that are visible and accessible to all Integrated Materiel Managers (IMMs). The accessibility measure is appropriate for measuring the goals of TAV. Further activity-oriented efforts to measure the number of assets actually redistributed would be less directly related. As long as the IMM has the visibility and accessibility of worldwide inventories, the decision to source is subject to individual situations. The TAV measure provides a good performance indicator of process responsiveness and support to the warfighter.

Recommendations

Continue pursuing efforts to expand visibility and access of DoD materiel through facilitated information-sharing initiatives between the Services and Defense Agencies. Eventually, DoD should have visibility and access to commercial inventories across industrial base segments via commercial best practices such as Prime Vendor arrangements.

Continue using the more stringent “accessibility” criteria for reporting TAV. Only accessible materiel is available to IMMs to satisfy immediate, lateral supply needs. Measuring TAV refusals would be useful to verify that IMM decisions to use TAV as an alternate materiel source were successful

6.04 - Actions for Logistics Transformation (Increase Total Asset Visibility)

- **Performance Measures**
  - The percentage of DoD's worldwide inventory that is both visible and accessible to Integrated Materiel Managers (IMMs)
  - TAV measure provides a good performance indicator of level of process responsiveness to the warfighter
- **Recommendations**
  - Continue pursuing efforts to expand visibility and access of DoD materiel through facilitated information-sharing initiatives between the Services and Defense Agencies
  - Continue using the more stringent "accessibility" criteria for reporting TAV

Initiative 6.04 - Actions for Logistics Transformation (Increase Total Asset Visibility)

Goal: Increase readiness and sustainability of military forces through redistribution of materiel assets from any source in DoD. In addition, the extra inventory coverage throughout DoD should result in some level of inventory reductions as spot shortages are filled more quickly from additional available sources.

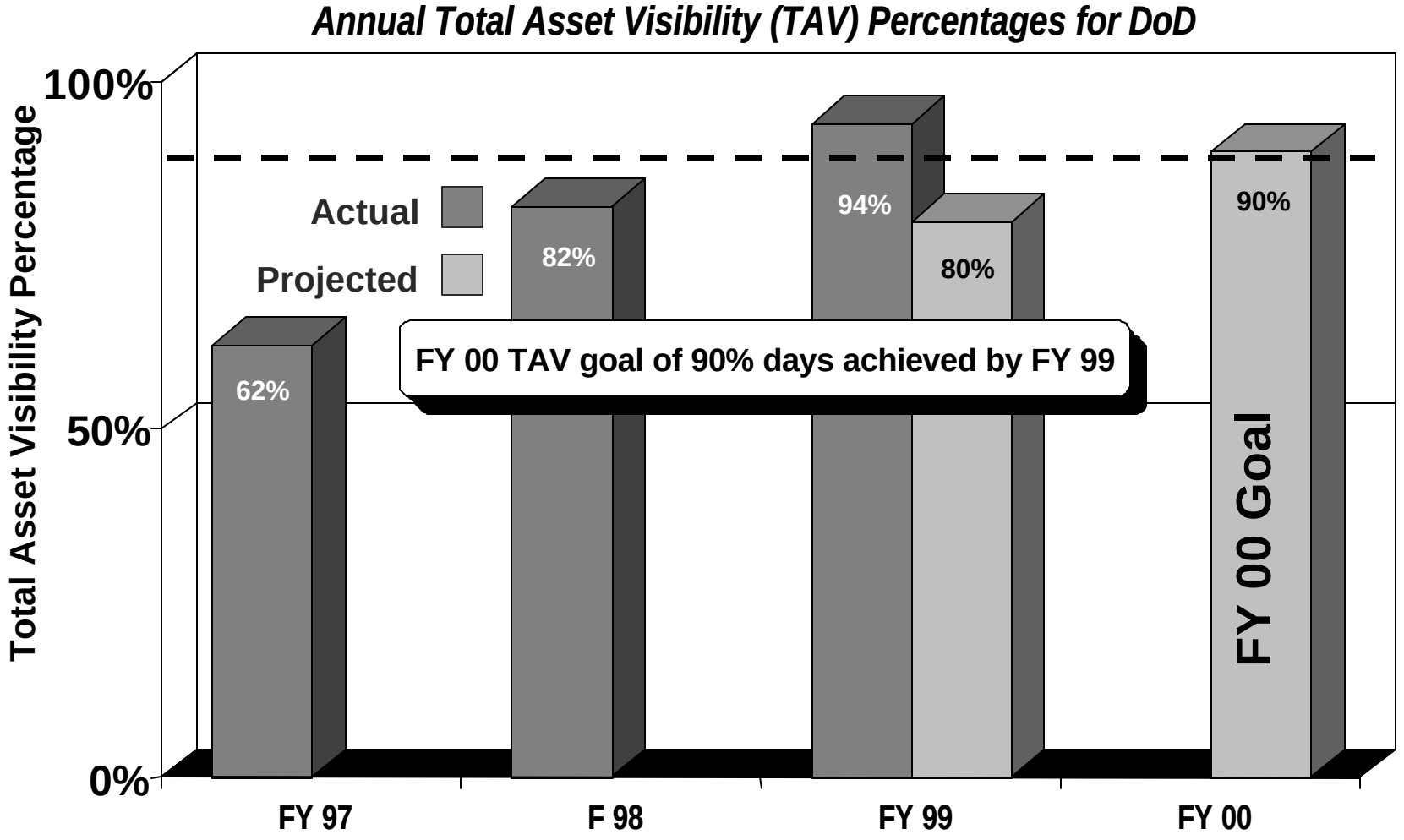
Performance Measure: Percentage of total DoD parts inventories that are visible and accessible to all IMMs

	FY 1997	FY 1998	FY 1999	Goal FY 2000
Projected			**80%**	**90%**
Actual	62%	82%	94%	

Source: GPRA Performance Plan FY 2000

Organization, Systems, and Other Issues: Total Asset Visibility is the combined percentage of DoD materiel assets visible and accessible to Integrated Materiel Managers.

Increase Total Asset Visibility of DoD Materiel Assets to 90% by FY 00



Initiative 6.04 - Actions for Logistics Transformation (Reduce Supply Inventory)

Background

This subinitiative is owned by ODUSD(L) Supply Chain Integration Office. The desired outcome of reduced DoD inventories is a reduction in associated costs to store excess inventories. Reduction in excess inventories is a form of reducing unneeded infrastructure, and contributes to lower total ownership costs. The inventory addressed by this initiative is the supply system inventory of repair parts and finished goods, which is larger than required to support today's smaller force structure. Another contributing factor to excess inventories is the DoD's shift to best commercial practices, which depends on greater use of commercial sources for direct vendor deliveries and shorter cycle times to reduce the requirements for large physical inventories.

Approach

The project team investigated current publicly available information and augmented this information with interviews with the initiative lead to gain a direct understanding of underlying goals and currently available information/data that could be used in developing performance measures and scorecards. Primary written sources for this initiative were the GPRA Performance Plans for FY 1999 and FY 2000. We then interviewed the initiative lead to revise the current unbounded time-based measure (response days) and adopt instead a more customer-aligned measure.

6.04 - Actions for Logistics Transformation (Reduce Supply Inventory)

- **Background**
  - Goal is to reduce infrastructure costs by management of worldwide supply inventories
- **Approach**
  - Literature review of regulations, audits, and policies
  - Interview with initiative lead

Initiative 6.04 - Actions for Logistics Transformation (Reduce Supply Inventory)

Performance Measures

Currently, inventory value is defined as the adjusted Acquisition value of DoD's secondary supply inventories. Inventory value is a surrogate for a more relative measure of inventory effectiveness. Inventories as such are not necessarily symptoms of inefficient Logistics processes. Wartime surge requirements and erosion of manufacturing bases for military unique-items are legitimate drivers of supply inventories. Recent changes to the secondary inventory definition are actually increasing the value of this measure. OSD is currently looking for another measure of inventory "value" for FY 2000.

Inventory values fluctuate from many drivers, both inflationary and definitional, and do not necessarily reflect the effectiveness of the inventories. Measuring the velocity of DoD inventories would be a better way to show the effectiveness of those inventories. Using aggregate forms of "inventory turns" would defeat the purpose of the measure. "Lifetime buy" materiel and war reserve materiel both would tend to skew inventory values upward. But if inventories were disaggregated into war reserve and active requirements, the inventory turns of the active items could be tracked and compared to industry performance factors by class of item. Active, finished goods items would also make the best candidates for commercial outsourcing initiatives, which would further drive DoD-stored inventories down. Supply chain response initiatives that reduce LRT would help reduce requirements for the remaining war reserve and surge requirements.

Recommendations

It is recommended that the velocity of DoD inventories be measured, because it would be a better way to show the effectiveness of supply inventories.

It is also recommended that aggregate forms of inventory turns not be used because aggregation would defeat the purpose of the measure. Inventories should be disaggregated, for example, into war reserve and active requirements and inventory turns measured separately.

6.04 - Actions for Logistics Transformation (Reduce Supply Inventory)

- **Performance Measures**
  - Current measure is adjusted acquisition value of DoD's secondary supply inventories
  - The effectiveness, not the size, of the inventory is a better metric of how well inventories are supporting readiness
  - Aggregate measures defeat the purpose of this measure
- **Recommendations**
  - The velocity of DoD inventories should be measured
  - Aggregate forms of inventory turns should not be used because aggregation would defeat the purpose of the measure. Inventories should be disaggregated into war reserve and active requirements and measured separately.

Initiative 6.04 - Actions for Logistics Transformation (Reduce Supply Inventory)

Goal: Reduce infrastructure costs by reducing secondary item inventories

Performance Measure: Adjusted acquisition value of DoD's secondary item inventories

	FY 1989	FY 1997	FY 1998	FY 1999	FY 2000
Goal					$56B
Actual	$107B	$62B	$58B	$55B	

Source: ODUSD(L), GPRA 2000 Performance Plan

Organization, Systems, and Other Issues: Secondary Item Inventory (SII) is the value of the supply system inventory of repair parts and finished goods, measured in constant FY 1995 dollars. Definitional changes will include more inventories in the FY2000 SII, resulting in a reassessment of this measure as a suitable metric

Reduce Secondary Item Inventory to $56 billion by FY 00